



**Environmental  
Notification Form**

*For Office Use Only*  
*Executive Office of Environmental Affairs*  
EOEA No.: 14095  
MEPA Analyst: ANNE CANADAY  
Phone: 617-626-1035

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Town of Ashland Source Management Project		
Street: Oak Street		
Municipality: Ashland & Southborough	Watershed: SuAsCo	
Universal Transverse Mercator Coordinates:	Latitude: 42° 17' 00" N Longitude: 71° 29' 48" W	
Estimated commencement date: Oct. 2008	Estimated completion date: Oct. 2009	
Approximate cost: \$5,500,000	Status of project design: 5 %complete	
Proponent: Town of Ashland		
Street: 101 Main Street		
Municipality: Ashland	State: MA	Zip Code: 01721
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Robert Sims		
Firm/Agency: Pare Corporation	Street: 8 Blackstone Valley Place	
Municipality: Lincoln	State: RI	Zip Code: 02865
Phone: 401-334-4100	Fax: 401-334-4108	E-mail: rsims@parecorp.com

- Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?  
 Yes  No
- Has this project been filed with MEPA before?  
 Yes (EOEA No. \_\_\_\_\_)  No
- Has any project on this site been filed with MEPA before?  
 Yes (EOEA No. \_\_\_\_\_)  No
- Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:
- a Single EIR? (see 301 CMR 11.06(8))  Yes  No
  - a Special Review Procedure? (see 301 CMR 11.09)  Yes  No
  - a Waiver of mandatory EIR? (see 301 CMR 11.11)  Yes  No
  - a Phase I Waiver? (see 301 CMR 11.11)  Yes  No

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres):

Are you requesting coordinated review with any other federal, state, regional, or local agency?  
 Yes  No

List Local or Federal Permits and Approvals:  
Order of Conditions through Conservation Commission

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- |   |                                       |  |
|---|---------------------------------------|--|
| <input type="checkbox"/> Land             | <input type="checkbox"/> Rare Species | <input type="checkbox"/> Wetlands, Waterways, & Tidelands      |
| <input checked="" type="checkbox"/> Water | <input type="checkbox"/> Wastewater   | <input type="checkbox"/> Transportation                        |
| <input type="checkbox"/> Energy           | <input type="checkbox"/> Air          | <input type="checkbox"/> Solid & Hazardous Waste               |
| <input type="checkbox"/> ACEC             | <input type="checkbox"/> Regulations  | <input type="checkbox"/> Historical & Archaeological Resources |

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
<b>LAND</b>				<input type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i>  Pipeline Occupancy Permit
Total site acreage	2.3			
New acres of land altered		0		
Acres of impervious area	2.3	0	2.3	
Square feet of new bordering vegetated wetlands alteration		0.0		
Square feet of new other wetland alteration		0.0		
Acres of new non-water dependent use of tidelands or waterways		0.0		
<b>STRUCTURES</b>				
Gross square footage	2,400	0	2,400	
Number of housing units	0	0	0	
Maximum height (in feet)	0	0	0	
<b>TRANSPORTATION</b>				
Vehicle trips per day	2	0	2	
Parking spaces	2	0	2	
<b>WATER/WASTEWATER</b>				
Gallons/day (GPD) of water use	0	0	0	
GPD water withdrawal	2.18	0.16	2.34	
GPD wastewater generation/ treatment	0	0	0	
Length of water/sewer mains (in miles)	170	1.89	171.89	

**CONSERVATION LAND:** Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

Yes (Specify \_\_\_\_\_)  No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

Yes (Specify \_\_\_\_\_)  No

**RARE SPECIES:** Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

Yes (Specify \_\_\_\_\_)  No

**HISTORICAL /ARCHAEOLOGICAL RESOURCES:** Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

Yes (Specify \_\_\_\_\_)  No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

Yes (Specify \_\_\_\_\_)  No

**AREAS OF CRITICAL ENVIRONMENTAL CONCERN:** Is the project in or adjacent to an Area of Critical Environmental Concern?

Yes (Specify \_\_\_\_\_)  No

**PROJECT DESCRIPTION:** The project description should include (a) a description of the project site, (b) a description of both on-site and off-site alternatives and the impacts associated with each alternative, and (c) potential on-site and off-site mitigation measures for each alternative (*You may attach one additional page, if necessary.*)

**SEE ATTACHED DESCRIPTION IN APPENDIX B**

**PROJECT DESCRIPTION  
SOURCE MANAGEMENT PROJECT  
TOWN OF ASHLAND  
ENVIRONMENTAL NOTIFICATION FORM  
TRANSMITTAL # W078780**

**PROJECT BACKGROUND**

The Town of Ashland withdraws their water from wells located near the Hopkinton Reservoir (Reservoir) located in the Town's of Hopkinton and Ashland (see Figure 1). The water is treated at the Howe Street Water Treatment Plant, (Treatment Plant) completed in July of 2002. The Treatment Plant is owned and operated by agreement by the Towns of Ashland and Hopkinton. The withdrawal is permitted through Water Withdrawal Permit # 9P2-3-14-014.02 as administered by the State of Massachusetts Department of Environmental Protection (Department). Ashland is permitted to withdrawal 613.20 million gallons per year from the wells while the Permit allows 182.5 million gallons of water per year to be withdrawn and delivered to the Town of Hopkinton through a dedicated pumping system and 12-inch water main from the finished water wetwell of the Treatment Plant. The total permitted annual withdrawal is 795.7 million gallons. There are no other active interconnections between Ashland and Hopkinton nor Ashland and Southborough.

**WITHDRAWAL CONCERNS**

In recent years, 2003 through 2005, the Permit allowance for total withdrawal was exceeded. Ashland is currently working with the Department to address issues of:

1. Net plant water production. *Performed a Water Audit with the assistance of a Department grant. Annually calibrate master meters.*
2. Unaccounted for water. *Performed a town-wide leak detection with the assistance of a Department grant. Beginning a 15-year meter replacement program identifying older meters and developing a system for monitoring meter age.*
3. Conservation pricing. *The town has had an increasing rate structure for many years and analyzes its effectiveness every year and adjusts rates accordingly.*
4. Conservation restrictions. *The Town adheres to the Department requirements for the implementation of water use restrictions when the level of the Reservoir hits certain trigger elevations. Ashland also institutes an odd-even irrigation schedule that extends from May 1 through August 31.*
5. Public education. *The town offers conservation kits for distribution to all residents. The availability of the test kits is indicated on the town web site, at the Town Hall and at the Water Department office*
6. Per capita water use. *Accurate metering, conservation pricing, the distribution of water saving devices and public education should work in concert to reduce individual water consumption. The use will be monitored and adjustments will be made where necessary to enhance reduction of per-capita use.*
7. Water withdrawal. *The Town is incorporating all of the aspects of the Permit to achieve annual water withdrawal amounts below the maximum permitted levels.*

In recent years, there has been a concern of the Department that overdrawing water from the wells will adversely impact the water level in the Reservoir. A larger concern with the Town is that the State of Massachusetts, Department of Conservation and Recreation (DCR) controls the management of the dam and the level of the Reservoir. DCR is required to allow for a minimum streamflow from the Reservoir but does not have a method to accurately measure this entire amount (some passes over a

weir and is recorded while some passes through a side channel unmeasured). This also contributes to the lowering of the level in the Reservoir but the impact is unknown. The project will also include the addition of flow monitoring devices for the outfall of the Reservoir to be operated and maintained by Ashland. Ashland understands that control of the Reservoir is still with DCR, but

#### EMERGENCY CONNECTION AND SOURCE MANAGEMENT

Another requirement of the Permit is for Ashland to develop an emergency connection plan. Ashland completed this task and identified Southborough as the most likely source in the event of an emergency. Abutting communities with a public water system cannot provide water in sufficient demand or pressure including Framingham, Holliston and Hopkinton. The Permit identified two specific cases that were included in the Emergency Connection Report

- Lowering of the Reservoir for maintenance of the dam – the work was assumed to occur outside of peak demand period
- Emergency repairs to the dam – assumed to occur during the peak demand period

Southborough was chosen for the interconnection because of the availability of water, the favorable hydraulic conditions and access to the Massachusetts Water Resources Authority (MWRA) supply. Out of this report, the concept of using the MWRA supply for source management was developed.

#### PROJECT DESCRIPTION

The project consists of construction a dedicated 10,000 foot 12-inch water main extension from the Town of Southborough's Water Pumping Station off of Boston Road in Southborough to a connection with the Town of Ashland distribution system on Oak Street in Ashland.

The purpose of this project is to redirect water from the Town of Southborough that is obtained from the MWRA. The project will also involve replacing pumps in the Southborough pumping station to allow Southborough to better meet peak demands.

#### PROJECT SITE

The existing pump station site is a rural level site off of Boston Road (Route 30) in Southborough. The pipeline route would follow from the intersection of Route 30 and Central Street in Southborough south across the Fitchburg Secondary railroad tracks (owned and operated by CSX Transportation), across Worcester Road (Route 9) along Oak Hill Road and across the Massachusetts Turnpike (Route 90) to the interconnection point in Ashland at Oak Street and Oregon Road. See Figure 1.

There are wetland resource areas along the route including the Sudbury Reservoir, but the pipeline will be constructed in the paved travel way and impacts to resource areas will be "buffer zone" only.

#### ON-SITE ALTERNATIVES (IN-TOWN)

To distribute the withdrawal points and perform source management, Ashland is also pursuing the reactivation of a well source off of Spring Street. However, the water quality is suspect and would require substantial treatment impacting the project viability. In 1982, the Department of Environmental Quality and Engineering (predecessor of the Department) approved the Spring Street well at a withdrawal rate of 600 gpm. The activation was not completed over concerns of the water quality and the cost to provide treatment.

In lieu of constructing a new treatment plant at Spring Street, Ashland has also investigated transmitting the Spring Street water to the Treatment Plant, but the costs are prohibitive.

It has been estimated that piping the water from the Spring Street site to the Treatment Plant would have a capital cost of \$5.4 million. This figure does not include increase in chemical or process costs for the mixing of the two different water quality sources. Building a new treatment plant at the Spring Street well site has been estimated to cost \$6.3 million. This includes the purchase of property from Aggregate Industries for access because the original agreement with the State for access through their property has expired with no interest from the State to allow further access.

Although the site has not been tested, the Department has expressed a concern with the presence of perchlorate in the area. Part of the Zone 2 Wellhead Protection Area (WPA) lies under property owned and managed by Aggregate Industries. The site has been actively used as a quarry with blasting for many years. It has been shown that materials used in blasting can contain high levels of perchlorate. Exposure to perchlorate has been shown to affect thyroid function and the Department has set an emergency standard of 2 parts per billion.

Providing treatment for the removal of perchlorate has been included as an add-on in the cost opinions and is predicted to add \$1.2 million to the cost of pumping the water to the Treatment plant and \$0.5 million to the overall project costs for treating water from the Spring Street well. The potential perchlorate contamination does not affect the \$5.5 million cost opinion to obtain water from Southborough.

**TABLE 1  
SUMMARY OF COST OPINIONS**

Option	Cost Opinion without perchlorate treatment (\$ million)	Cost Opinion with perchlorate treatment (\$ million)
1 – Treatment @ Spring Street	\$6.26	\$6.83
2 – Pump from Southborough	\$5.45	\$5.45
3 – Treatment at Treatment Plant	\$5.44	\$6.64

Other consultants and reports have investigated for a new groundwater source and the viability is restricted by water quality, available land and wellhead protection infringements.

OFF-SITE ALTERNATIVES (OUT-OF-TOWN)

Obtaining water from the MWRA through the Town of Southborough is the most viable process for managing the source water in Ashland. During the summer months when the impact to the Reservoir would be greatest, water would be pumped from Southborough. We estimate the annual need to be 60 million gallons (average day demand of 0.16 million gallons per day).

Ashland is aware that certain notifications will be required for the introduction of the MWRA water into the Ashland system. Specifically, that the MWRA water is treated with fluoride and disinfection

is in the form of chloramines. Currently, Ashland does not provide water with fluoride and disinfects with sodium hypochlorite.

ON-SITE MITIGATION (IN-TOWN)

Ashland will continue to work with the Department to manage the water use within the community. These activities can include monitoring net water production at the Treatment Plant, tracking unaccounted for water, annually use water use to set appropriate rates, continue to perform public education to promote water conservation and incorporate these tactics to perform better management of the water withdrawal and other permit conditions.

OFF-SITE MITIGATION (OUT-OF-TOWN)

As described above the Town of Ashland will perform additional work at the Town of Southborough water pumping station to increase system capacity and reduce the impact of peak demands on the Southborough system.